

PTO/SB/80 (04-05)

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### POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

Practitioners associated with the Customer Number: 202.77	I hereby r 37 CFR 3	•	evious powers of attorney	given in the appl	ication identified in th	e attached stater	nent under
OR Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):    Name	_					<del></del> -	
Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):    Name		titioners associa	ated with the Customer Number:	20277			
as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).  Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:  The address associated with Customer Number:  OR  Firm or Individual Name Address  City State Zip  Country  Telephone Email  A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.  SIGNATURE of Assignee of Record  The individual whose signature and title is supplied below is authorized to act on behalf of the assignee		titioner(s) name	d below (if more than ten patent ;	practitioners are to b	e named, then a customer	number must be use	ed):
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OR    Firm or   Individual Name   Address	Please char	nge the corresp	ondence address for the applicat	ion identified in the a	attached statement under 3	7 CFR 3.73(b) to:	
Firm or Individual Name  Address  City  Country  Telephone  Email  Assignee Name and Address:  A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.  SIGNATURE of Assignee of Record  The individual whose signature and title is supplied below is authorized to act on behalf of the assignee		he address ass	ociated with Customer Number:				
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Title Global IP Portfolio Counsel	· · · · · · · · · · · · · · · · · · ·				1.00	712.002	.e

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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### STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Advanced Micro Devices, Inc. Application No./Patent No.:10/718,707 Filed/Issue Date:November 24, 2003 Entitled :METHODS AND ARRANGEMENTS FOR NITROGEN-RICH REGIONS IN NON-VOLATILE SEMICONDUCTOR MEMORY **DEVICES (AS AMENDED)** Advanced Micro Devices, Inc., a Corporation, (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is: 1. \( \subseteq \) the assignee of the entire right, title, and interest; or 2. an assignee of an undivided part interest in the patent application/patent identified above by virtue of either: A. [X] An assignment from the inventor(s) of the patent application/patent above. The assignment was recorded in the Patent and Trademark Office at Reel 9431, Frame 0778, or for which a copy thereof is attached. OR B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below: 1. From: To: The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. 2. From:\_\_\_ The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. 3. From: To:\_\_\_\_ The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. [X] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFT Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8] The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee. s. 10, 2005

> Paul S. Drake, Esq. Typed or printed name

Global IP Portfolio Counsel Title



**DECEMBER 29, 1998** 

MCDERMOTT, WILL & EMERY JOHN A. HANKINS 99 CANAL CENTER PLAZA SUITE 300 ALEXANDRIA, VA 22314



## UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/28/1998

REEL/FRAME: 9431/0778

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RAMSBEY, MARK

DOC DATE: 08/24/1998

ASSIGNOR:

HADDAD, SAMEER

DOC DATE: 08/24/1998

ASSIGNOR:

CHAN, VEI-HAN

DOC DATE: 08/24/1998

ASSIGNOR:

SUN, YU

DOC DATE: 08/24/1998

ASSIGNOR:

CHANG, CHI

DOC DATE: 08/19/1998

ASSIGNEE:

ADVANCED MICRO DEVICES, INC.
ONE AMD PLACE
PO BOX 3453

SUNNYVALE, CALIFORNIA 94088-3453

9431/0778 PAGE 2

SERIAL NUMBER: 09143089

PATENT NUMBER:



# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
WESTINGLICO DEPENDENT 08/28/1998
ISSUE DATE:

MAURICE CARTER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Docket No.: 50100-513 (1033-445)

### ASSIGNMENT

WHEREAS WE, Mark Ramsbey of Sunnyvale, CA, Sameer Haddad of San Jose, CA, Vei-Han Chan of San Jose, CA, Yu Sun of Saratoga, CA, and Chi Chang of Redwood City, CA, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled METHODS AND ARRANGEMENTS FOR REDUCING FALSE PROGRAMMING IN NON-VOLATILE SEMICONDUCTOR MEMORY DEVICES, executed by us on the date of execution of this document, as shown below, and filed concurrently herewith;

AND WHEREAS, Advanced Micro Devices, Inc., a corporation of the State of <u>Delaware</u> and having an address of One AMD Place, P. O. Box 3453, Sunnyvale, California 94088-3453 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor:

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto Advanced Micro Devices, Inc., its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Advanced Micro Devices, Inc., its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

8124/98	Mark Runsley
Date	Mark Ramsbey
8/24/98	Sameer Middel.
Date	Sameer Haddad
Date	Vei-Han Chan
8->4-98	<u></u>
Date	Yu Sun
Aug. 19, 1998	Chi elican
Date	Chi Chang

STATE OF CALIFORNIA )
(0,1,(0,1)) SS:
On August 24, 1998 before me, Morena G. Molina, Notary Public
on Quant 24,1998 herore me Morena G. Molina, Notary Jublice
personally appeared Mark Ramsbey
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authoris
capacity(jes), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which
person(s) acted, executed the instrument.
WITNESS my hand and official seal.
WITHESS my name and official scale
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Notory Public - Calibratia
My commission expires 19, 1999.  My Comm. Expires Jul 19, 1999
STATE OF CALIFORNIA
COUNTY OF Santa Clara SS:
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capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which
person(s) acted, executed the instrument.
WITNESS my hand and official seal.
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(signature of Notary)  (signature of Notary)  (commission 1005389)  (commission 1005389)
Notary Public A COUNTY
My Comm. Expires Jul 19.1999
STATE OF CALIFORNIA )
) SS:
COUNTY OF
On before me,
personally appeared Vei-Han Chan
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/s
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorize
capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which
person(s) acted, executed the instrument.
WITNESS my hand and official seal.
(signature of Notary) (seal of Notary)
My commission expires

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3	STATE OF CALIFORNIA ) SS:
9	COUNTY OF Santa Clara)
	on August 24, 1998 before me, Morana G. Molina, Notary Public
_	personally appeared Yu Sun ——————————————————————————————————
S	personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/ar subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorize capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
•	WITNESS my hand and official seal.  (signature of Notary)  (seal of Notary)
Ī	(signature of Notary)  (seal of Notary)  MCRENA G. MOIJNA  Commission #1065389  Notary Public — California  DATA CLARA COUNTY
<u>s</u>	STATE OF CALIFORNIA ) SS:
9	COUNTY OF Santa Clara)
	on August 19, 1998 before me, Morena G. Molina, Notary Public
	personally appeared Chi Chang personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/ar
	subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorize
	capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the
	person(s) acted, executed the instrument.
1	WITNESS my hand and official seal.
_	(signature of Notary) (seal of Notary)
-	MORENA G. MOUNA
ľ	My commission expires //9, /999.  Commission #1055389  Notary Public — California  CANTA CLARA COUNTY  My Comm. Expires Jul 19,1999

Docket No.: 50100-513 (1033-445)

### ASSIGNMENT

WHEREAS WE, Mark Ramsbey of Sunnyvale, CA, Sameer Haddad of San Jose, CA, Vei-Han Chan of San Jose, CA, Yu Sun of Saratoga, CA, and Chi Chang of Redwood City, CA, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled METHODS AND ARRANGEMENTS FOR REDUCING FALSE PROGRAMMING IN NON-VOLATILE SEMICONDUCTOR MEMORY DEVICES, executed by us on the date of execution of this document, as shown below, and filed concurrently herewith;

AND WHEREAS, Advanced Micro Devices, Inc., a corporation of the State of <u>Delaware</u> and having an address of One AMD Place, P. O. Box 3453, Sunnyvale, California 94088-3453 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto Advanced Micro Devices, Inc., its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Advanced Micro Devices, Inc., its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date	Mark Ramsbey
Date	Sameer Haddad  7/2-1dan Chun
Aug. 24, 98 Date	Vei-Han Chan
Date Aus. 19, 199	Yu Sun Chi Chang
Date V	Chi Chang

STATE OF CALIFORNIA	) ) SS:	•		
COUNTY OF	•			
On	before	me,		
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WITNESS my hand and officia	al seal.			
		_(signature of Notary)	(seal	of Notary)
My commission expires				
STATE OF CALIFORNIA	) ) SS:			
COUNTY OF		• •		
On	before	me,		
WITNESS my hand and offici		_(signature of Notary)	(seal	of Notary)
My commission expires				
STATE OF CALIFORNIA	) )_SS: <b>44</b> A		•	
On Av6.24/9	Chan	e me, <i>KATHLEO</i>		
personally known to me (or p subscribed to the within instru- capacity(ies), and that by nerson(s) acted, executed the	proved to me on the iment and acknow her/their signature	ladged to me that Mathe	thay evecuted the sam	e in anterner/ineir authorize
WITNESS my hand and office	ial seal	(signature of Notary)	(sea)	of Notary)
My commission expires	11/17/00	(ssgnature or rount)	NOTARY COM SAN	FFICIAL SEAL THLEEN M. ITTEL PUBLIC - CALIFORNIA MISSION # 1104498 TA CLARA COUNTY sion Exp. November 17, 2000

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'STATE OF CALIFO	ORNIA )			
	) SS:	-		
COUNTY OF	)			
Ön	be	efore me,		
personally appeared		on the basis of satisfactory of	widenes) to be the many	an(a) whose non-(a) i
•	•	nowledged to me that he/she		
capacity(ies), and the	at by his/her/their signa	ture(s) on the instrument th		
person(s) acted, exec	cuted the instrument.	·		
WITNESS my hand	and official seal.			
		(signature of Notary)	ا ادمه)	of Notary)
	······································	(signature or rectary)	(Scar (	or rectary)
My commission expi	res			
STATE OF CALIFO	ORNIA )			
COUNTY OF San	) SS:			
COUNTY OF San	MALLIANUS.			_
		,		( ) //-
On August	19, 1998 b	efore me, Morena G	. Molina, Nota	ry Public
On August personally appeared	19, 1998 b			<del></del>
On August personally appeared personally known to	/9, 1978 be	efore me, Morena Gon the basis of satisfactory on owledged to me that he/she	evidence) to be the pers	on(s) whose name(s) is
On August personally appeared personally known to subscribed to the wit capacity(ies), and th	19, 1978 be Chi Chang me (or proved to me chin instrument and ack at by his/her/their signa	on the basis of satisfactory	evidence) to be the pers	on(s) whose name(s) is in his/her/their author
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